

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
31 March 2005 (31.03.2005)

PCT

(10) International Publication Number
WO 2005/028348 A3

(51) International Patent Classification⁷: **G07D 11/00**

Drive, Palatine, IL 60067 (US). **JENRICK, Charles, P.**
[US/US]; 3338 N. Paulina #2S, Chicago, IL 60657 (US).

(21) International Application Number:
PCT/US2004/029914

(74) Agents: **SWINDELLS, Justin, D.** et al.; Jenkins &
Gilchrist, 225 W. Washington Street, Suite 2600, Chicago,
IL 60606-3418 (US).

(22) International Filing Date:
14 September 2004 (14.09.2004)

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GI, GM, GR, GU, HN, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/502,924 15 September 2003 (15.09.2003) US

(71) Applicant (*for all designated States except US*): **CUM-
MINS-ALLISON CORP.** [US/US]; 891 Feehanville
Drive, Mount Prospect, IL 60056 (US).

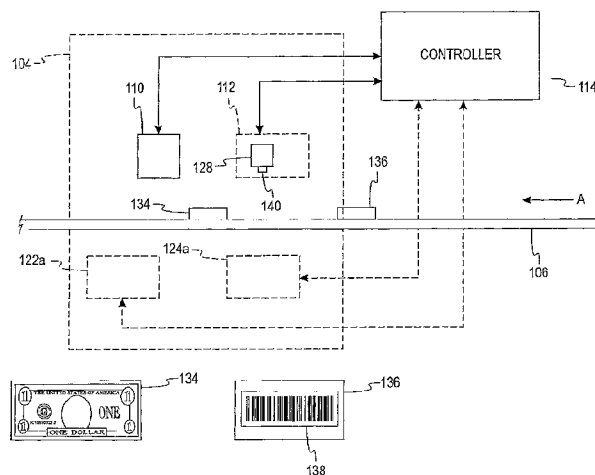
(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **KLEIN, Robert, J.**
[US/US]; 2901 N. Walcott #G, Chicago, IL 60657 (US).
HALLOWELL, Curtis, W. [US/US]; 1417 E. Reynolds

[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR PROCESSING BATCHES OF DOCUMENTS



(57) Abstract: A method of processing documents by receiving at least a batch of documents and a separator card in an input receptacle of a document processing device. The separator card includes a conductive material disposed on one side, and a barcode indicative of the source of the batch of documents. The documents and separator card are transported via a transport mechanism past an evaluation unit and a field-effect sensor, respectively. The document processing device evaluates each document, determines whether the document meets or fails predetermined criteria, and detects the presence of the conductive material when a separator card is transported past the sensor. The source identification information from each separator card is entered into a memory of the document processing device after all the documents from the corresponding batch of documents have met the predetermined criteria. Feeder operation is paused between each batch long enough to verify that the previous batch closed successfully. Pausing feeder operation to address document anomalies before subsequent batches are processed promotes batch integrity and reduces operator confusion.



SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

(88) Date of publication of the international search report:
9 June 2005

Declaration under Rule 4.17:

— *as to the applicant's entitlement to claim the priority of the
earlier application (Rule 4.17(iii)) for all designations*

Published:

— *with international search report*

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2004/029914

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G07D11/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 100 64 009 A1 (GIESECKE & DEVRIENT GMBH) 4 July 2002 (2002-07-04)	1-15, 20-39 16-19
Y	paragraph '0019! paragraph '0021! - paragraph '0022! paragraph '0026! - paragraph '0027! paragraph '0035! paragraph '0038!; figures 1-3 -----	
Y	US 2003/023342 A1 (CHRISTL RUDOLF ET AL) 30 January 2003 (2003-01-30) paragraph '0003! - paragraph '0004! paragraph '0017! - paragraph '0024! ----- -/--	16-19

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

7 March 2005

Date of mailing of the international search report

16/03/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax: (+31-70) 340-3016

Authorized officer

Stenger, M

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2004/029914

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P	WO 03/107279 A (GIESECKE & DEVRIENT GMBH; DEMMELE, ERWIN; SCHMIDT, ALFRED; WERNER, FR) 24 December 2003 (2003-12-24) abstract page 10, line 7 - page 15, line 19 -----	1,22
A	EP 1 253 560 A (GIESECKE & DEVRIENT GMBH) 30 October 2002 (2002-10-30) paragraph '0002! - paragraph '0003! paragraphs '0017! - '0022! -----	16-19
A	US 2002/020603 A1 (JONES, WILLIAM, J ET AL) 21 February 2002 (2002-02-21) abstract; figures 1b,2,6,7b paragraph '0048! -----	1-39
A	EP 1 199 682 A (GIESECKE & DEVRIENT GMBH) 24 April 2002 (2002-04-24) paragraph '0028! - paragraph '0030! paragraph '0041! -----	1-39
A	WO 01/99059 A (GIESECKE & DEVRIENT GMBH; KUNZ, HANS-WOLFGANG; LOEFFLER, LUKAS; SCHINZ) 27 December 2001 (2001-12-27) page 15, line 22 - page 16, line 27 -----	1-39

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/029914

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 10064009	A1	04-07-2002	NONE	
US 2003023342	A1	30-01-2003	DE 10133860 A1	06-02-2003
			CA 2397126 A1	08-02-2003
			EP 1276080 A2	15-01-2003
WO 03107279	A	24-12-2003	DE 10226540 A1	08-01-2004
			WO 03107279 A2	24-12-2003
EP 1253560	A	30-10-2002	DE 10120904 A1	31-10-2002
			EP 1253560 A2	30-10-2002
			US 2002158397 A1	31-10-2002
US 2002020603	A1	21-02-2002	US 6398000 B1	04-06-2002
			US 6318537 B1	20-11-2001
			WO 03029913 A2	10-04-2003
			US 2005040225 A1	24-02-2005
			AU 3679701 A	20-08-2001
			CA 2396112 A1	16-08-2001
			DE 10194950 T0	05-12-2002
			EP 1257976 A1	20-11-2002
			WO 0159723 A1	16-08-2001
			US 2004016621 A1	29-01-2004
			US 6588569 B1	08-07-2003
			US 6601687 B1	05-08-2003
			US 2004251110 A1	16-12-2004
			US 6637576 B1	28-10-2003
EP 1199682	A	24-04-2002	DE 10051554 A1	02-05-2002
			EP 1199682 A2	24-04-2002
WO 0199059	A	27-12-2001	DE 10030221 A1	03-01-2002
			AT 268033 T	15-06-2004
			AU 7967001 A	02-01-2002
			DE 50102421 D1	01-07-2004
			WO 0199059 A1	27-12-2001
			EP 1297498 A1	02-04-2003
			US 2004225407 A1	11-11-2004